

Semi-discrete events with fuzzy logic

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Abstract

Models with events that have small non-zero duration are considered. The goal of this paper is to propose an event simulation paradigm, different from the traditional crisp discrete event simulation. This is a methodological and conceptual approach, rather than a practical implementation. Some issues related to simultaneous event treatment in the classic discrete event simulation are addressed. The proposed approach is to equip the events interactions with fuzzy logic and introduce events with finite duration instead of those executed in discrete time instants. It is pointed out that some difficulties that arise while handling simultaneous events do not exist in models with events of finite duration.

Keywords

simulation modeling discrete events DEVS fuzzy logic

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